

Claims

1. System for generating automation code from descriptions (1)
enriched with control-relevant information, comprising
 - 5 - components (2) described in the descriptions (1), the
components having ports (6) and being represented in
each case by at least one functional module (3),
 - input/output information on the ports (6) reproduced
from directed relationships (9) between the components
10 (2) contained in the descriptions (1),
 - signals (4) associated with the functional modules (3),
the signals (4) being provided for transmission via the
ports (6) of the components (2),
 - first means (5) for defining metainformation for the
15 signals (4), and
 - a code generator (7) for producing automation code
through interconnection of the signals (4).
2. System according to claim 1, characterized in that the
20 system is provided for the generation of automation code
for manufacturing and/or processing plants.
3. System according to claim 1 or 2, characterized in that a
drawing with control-relevant information is provided for
25 use as description (1).
4. System according to claim 1 or 2, characterized in that
fourth means for inputting control-relevant information are
provided for use as description (1).
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5. System according to any one of the preceding claims,
characterized in that a material and/or energy and/or

information flow in a manufacturing and/or processing plant is provided as a basis for reproducing the directed relationships between the components.

- 5 6. System according to any one of the preceding claims, characterized in that the generation of automation code is provided for central and/or distributed automation solutions.
- 10 7. Method for generating automation code from descriptions (1) enriched with control-relevant information, whereby
- components (2) described in the descriptions (1) are represented in each case by at least one functional module (3), and via ports (6)
 - 15 - input/output information on the ports (6) is reproduced from directed relationships (9) between the components (2) contained in the descriptions (1),
 - signals (4) associated with the functional modules (3) are transmitted via the ports (6) of the components,
 - 20 - metainformation is defined for the signals (4) and
 - automation code is generated through interconnection of the signals (4).
- 25 8. Method according to claim 7, characterized in that automation code is generated for manufacturing and/or processing plants.
- 30 9. Method according to claim 7 or 8, characterized in that a drawing with control-relevant information is used as description.

10. Method according to claim 7 or 8, characterized in that control-relevant information is input as description.
11. Method according to any one of claims 7 to 10,
5 characterized in that a material and/or energy and/or information flow in a manufacturing and/or processing plant is used as a basis for reproducing the directed relationships between the components.
- 10 12. System according to any one of the preceding claims, characterized in that automation code is generated for central and/or distributed automation systems.